

Appendix B

Potential Air Quality Trigger-points/Management Action Points for Managing Smoke and Emissions from Naturally Ignited Fires June 1, 2011

This list provides guidance to land management agencies (LMA) and air quality management/air pollution control districts (Districts) when establishing Trigger Points/Management Action Points to manage the smoke and emissions from Naturally Ignited Fires. Reaching a Trigger-point mean the LMA will evaluate and implement mitigation measures appropriate to the specific instance as agreed to in the Smoke Management Plan (SMP) or Wildland Fire Decision Support System document (WFDSS). The LMA should make every effort to inform the District what is being done to minimize smoke and emissions from the Naturally Ignited Fires.

This list is not exhaustive of the potential Trigger Points/Management Action Points. Additionally, not all Trigger Points/Management Action Points will be applicable in every instance. Districts and LMAs should discuss which Trigger Points/Management Action Points are appropriate on a per-fire basis. The SMP/WFDSS should document which Trigger Points/Management Action Points are to be used.

Trigger Points/Management Action Points - Either geographical points, specific points in time or measured pollutant concentration where an escalation or alteration of management actions is warranted. These points are defined and the management actions to be taken are clearly described in an approved SMP or WFDSS Document. Timely implementation of the actions when the fire reaches the action point is generally critical to successful accomplishment of the objective. *(Source: federal Wildland and Prescribed Fire Management Policy)*

Ambient Air Quality Standard Exceedance

- Exceedance of any state of federal Ambient Air Quality Standard
- Trigger-points should be set to avoid exceedances
- Regional and localized exceedances should be considered

Nuisance complaints

- Minimum threshold can be established, noting that in some instances more or fewer complaints might constitute a Trigger-point
- Confirmed complaints
- Reflective of smoke level, intensity, and duration of impacts on communities

Air Quality and Meteorological Conditions

- Monitored or Forecasted
- Atmospheric stability
- Regional air flow generally associated with poor air quality
- Nighttime drainage patterns
- Inversion layers
- Profiler data
- Fire specific monitors
- Fuel and transport conditions (moisture levels, fire activity, etc.)

Cumulative Considerations

- Availability of LMA manpower - GACC preparedness levels
- Proximity and number of other fires in the region
- Unusual emission events (tire fires, etc.)

Fire Specific Changes

- Number of acres growth per day
- Changes in fuel type
- Changes in elevation

Emission Threshold

- Daily, weekly, or total emission limitations

Temporal Trigger-points

- Time of year/Seasonality
- Time of day

Past Experience

- Knowledge of fire behavior in area
- Community tolerance levels